

Claims

1. Method to assist navigation comprising the steps of:
 - providing a digitized map,
 - determining a static route based on at least two waypoints and static road information from the digitized map or by uploading a route,
 - determining a dynamic route based on static road information from the digitized map and dynamic information and
 - outputting navigation information.
2. Method according to claim 1, further comprising the steps of comparing the static route and the dynamic route, and outputting dynamic route navigation information if the static route and the dynamic route differ.
3. Method according to claim 1 or 2, further comprising, preceding the outputting step, the step of formatting the navigation information output differently for the static route navigation information and for the dynamic route navigation information.
4. Method according to claim 3, wherein navigation information for the static route is not output at all or output only optically and navigation information for the dynamic route is output acoustically.
5. Method according to one of the preceding claims, further comprising the step of determining current position data.
6. Method according to claim 5, wherein the dynamic route is re-determined on a regular basis and/or when new dynamic information is provided to the navigation system and/or if the current position is neither on the previously determined dynamic route nor on the static route.
7. Method according to claim 6, wherein, when the current position is neither on the previously determined dynamic route nor on the static route, the dynamic route is re-determined such that the re-determined dynamic route and the static route have more than one waypoint in common.

8. Method according to one of the claims 5 to 7, further comprising the step of outputting static route navigation information if the navigation system is on the static route and providing dynamic route navigation information if the navigation system is on the dynamic route but not on the static route.
9. Method according to one of the claims 5 to 8, further comprising the step of comparing a following manoeuvre step of the static route and a following manoeuvre step of the dynamic route, if the current position data corresponds to a waypoint on both the static and the dynamic route, and outputting dynamic route navigation information about the following manoeuvre step, if the manoeuvre steps are different.
10. Method according to one of the preceding claims, wherein at least one of the steps of determining the static and/or the dynamic route is performed on request.
11. Method according to one of the preceding claims, further comprising the step of storing the static route on a non-volatile memory.
12. Computer program product directly loadable into an internal memory of a digital computer, comprising software code portions for performing the steps of the method according to one of the claims 1 to 11.
13. Computer program product stored on a medium readable by a computer system comprising computer readable program means for causing a computer to perform the steps of the method according to one of the claims 1 to 11.
14. Navigation system, in particular for performing the method according to one of the claims 1 to 11, comprising
 - input means for inputting data;
 - data storage means for storing data, in particular a digitized map;
 - dynamic information receiving means for receiving dynamic information data;
 - data processing means for providing navigation information;

- outputting means for outputting navigation information, in particular optical and acoustical means;

wherein the data processing means is designed such that a static route is determined based on at least two waypoints and static road information from a digitized map or by uploading a route and a dynamic route is determined based on static road information from the digitized map and dynamic information.

15. The navigation system according to claim 14, further comprising formatting means being designed to format the output of the navigation different for the static route and the dynamic route.
16. The navigation system according to claim 14 or 15, further comprising position detection means being designed to provide current position data and wherein the processing means are designed such that it identifies whether the current position of the navigation system is on the static route and/or the dynamic route or on none of both.
17. The navigation system according to claim 16, wherein the communication means are designed such that if the navigation system is on the static route static route navigation information is output and if the navigation system is on the dynamic route but not on the static route dynamic route navigation information is output.
18. The navigation system according to one of claim 14 to 17, further comprising comparing means being designed to compare the static route and the dynamic route and
wherein the communication means are designed such that dynamic road navigation information concerning the differences is output.
19. The navigation system according to one of claims 16 to 18, further comprising comparing means to compare the static and the dynamic route,
wherein the comparing means are designed such that, if the current position is both on the static route and the dynamic route, the following manoeuvre, based on the current position, of the static route and the dynamic route are compared and that the communication means are designed such that if the manoeuvre are different, navigation information concerning the dynamic route is output.

20. Vehicle comprising the navigation system according to claims 14 to 20.